

and 283 receiving pLVAD. As demonstrated in Figure 1, there was no significant difference in 30 day mortality, MACE, hemorrhagic shock and neurologic dysfunction among patients who either received pLVAD or IABP.

Conclusions: Our analysis could evaluate all the current RCTs and suggest there might not be any difference on clinical outcomes between IABP and pLVAD for high risk PCI. Further clinical trials are warranted.



TCT-67

Can Duration Of Cardiopulmonary Resuscitation Predict Favourable Functional Status After An Out Of Hospital Cardiac Arrest? An Analysis From A Dedicated Heart Attack Centre

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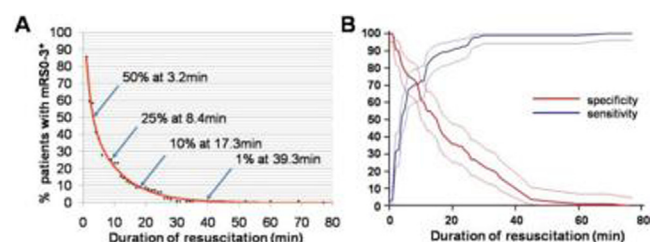
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Background: Whether the duration of cardiopulmonary resuscitation (CPR) reliably predicts functional survival following an out of hospital cardiac arrest (OOHCA) is unclear. We explored the association with CPR duration and functional survival in patients with OOHCA.

Methods: We analysed 174 consecutive patients who were successfully resuscitated after OOHCA between 2011-2013 at Harefield Hospital - a designated Heart Attack Centres in London. We analysed (a) all-cause mortality at 1 year; and (b) functional status at discharge using a modified Rankins score (mRS: 0-6), where mRS0-3+ would be indicative of a favourable functional outcome.

Results: Duration of CPR was an independent predictor of mRS0-3+ (OR=0.94, 95% CI:0.90-0.98, p=0.007) and 1-year mortality (HR=1.03, 95% CI:1.01-1.05, p<0.001). When plotting the proportion of patients with mRS0-3+ as a function of CPR duration, this proportion of patients fell exponentially with every minute of CPR (fig 1a). Receiver operator curve analysis identified CPR duration ≤8 min as the optimum criterion for mRS0-3+ (AUC=0.76, 95% CI:0.69-0.82), sensitivity=70.5 and specificity=73.1. A criterion value with high specificity would be more meaningful, and the specificity for CPR duration ≤3 min was 89.7 after which it progressively decreased (fig 1b).

Conclusions: The duration of CPR is a powerful predictor of functional recovery following OOHCA. Whilst other factors are contributory, these data suggest that CPR duration ≤3min is likely to be associated with good functional recovery. The relationship between CPR duration and functional recovery warrants further evaluation.



TCT-68

Predictors of Elective Support Device Insertion Prior to High Risk Percutaneous Coronary Intervention: Changing Trends between 1993-2013

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Background: High risk percutaneous coronary interventions (PCI) may be preceded by elective support device insertion, though the evidence for such a practice is relatively weak. We sought to analyze the changing trends and predictors for prophylactic support device insertion in these patients over the last 20 years.

Methods: Retrospective analysis of all patients who underwent PCI at Cleveland Clinic between 1993 – 2013 with or without support device insertion was performed. Trends for device insertion in high risk patients undergoing PCI, like those in clinical shock, acute myocardial infarction (MI) and unprotected left main intervention over the last 20 years were reviewed. Predictors for support device insertion in these patients from 1993-2000 were compared to those from 2001-2013.

Results: A total of 666 elective support devices were inserted prior to high risk PCI from 1993-2013. Between 1993-2000, acute myocardial infarction (MI) (OR: 10.05), ejection fraction < 40% (OR: 8.31) and unprotected left main intervention (OR: 4.59) were the three most significant predictors for device insertion prophylactically. Between 2001-2013, unprotected left main intervention (OR: 9.91), ejection fraction < 40% (OR: 5.61) and clinical shock (OR: 5.24) were the biggest predictors, with the odds of support device insertion in acute MI in absence of clinical shock reduced to 1.96.

